



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,978	02/09/2004	Tilmann Lorenz	2001PI8006WOUS	9576

46726 7590 07/25/2007  
BSH HOME APPLIANCES CORPORATION  
INTELLECTUAL PROPERTY DEPARTMENT  
100 BOSCH BOULEVARD  
NEW BERN, NC 28562

EXAMINER
----------

PERRIN, JOSEPH L

ART UNIT	PAPER NUMBER
----------	--------------

1746

MAIL DATE	DELIVERY MODE
-----------	---------------

07/25/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/774,978

Applicant(s)

LORENZ ET AL.

Examiner

Joseph L. Perrin, Ph.D.

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 19-33 is/are pending in the application.
- 4a) Of the above claim(s) 22-25 and 30-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-21 and 26-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 04 October 2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Group I, claims 19-33, in the reply filed on 30 April 2007 is acknowledged.
2. In addition, applicant's arguments with respect to the Species restriction are persuasive and Species 1 and 2 are grouped as a single species. Thus, applicant's election without traverse of Species 2, readable on claims 19-21 and 26-29 is also acknowledged.
3. Claims 22-25 and 30-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 30 April 2007.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 19-20 & 29 are rejected under 35 U.S.C. 102(b) as being anticipated by the article of BUGNACKI et al. ("BUGNACKI"; cited by applicant). BUGNACKI discloses that it is known to provide a washing machine with the claimed thermal accelerator to use a temperature profile change to measure imbalance/vibration in the washing

Art Unit: 1746

machine (see entire document, especially pages 8-9). Re claim 20, the position is taken that the sensor must be connected (either directly or indirectly) to the wash tub/drum in order to sense the imbalance/vibration. Accordingly, recitation of BUGNACKI reads on applicant's claimed invention.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Art Unit: 1746

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,685,038 to SMITH et al. ("SMITH") in view of BUGNACKI.

SMITH discloses a washing machine with a lever device and sensor (32) coupled to a washing machine tub (12) for sensing load imbalance (see Figures 1-2 and relative associated text). However, SMITH does not disclose the sensor as being a temperature profile measuring sensor. BUGNACKI teaches that is known to provide a washing machine with a temperature profile measuring sensor in order to provide an inexpensive, high-reliable sensor and to avoid stiction problems associated with mechanical sensors (see page 9).

Therefore, the position is taken that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted the mechanical sensor of SMITH with the temperature profile sensor of BUGNACKI in order to achieve the aforementioned known advantages associated therewith. Moreover, there would have been a reasonable expectation of success in providing one washing machine imbalance sensor for another since both references are analogous art and the imbalance sensors are functional equivalents.

Art Unit: 1746

10. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2001/0025392 to YOUN et al. ("YOUN") in view of BUGNACKI and SMITH.

YOUN discloses a washing machine (100) with load sensor for sensing multiple parameters including imbalance and load size, a controller (130) for calculating the imbalance and load size, and a display device (140) for displaying the operating state of the washing machine with sense signal generation means for generating a fault sense signal indicative of a machine fault (see entire document, for instance, Figure 2 and relative associated text and paragraph [0014]).

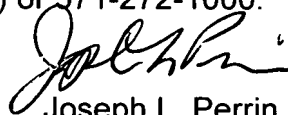
The combination of SMITH and BUGNACKI (see previous rejection) teach that it is known to provide a washing machine with a temperature profile measuring sensor as the imbalance detecting sensor in order to provide an inexpensive, high-reliable sensor and to avoid stiction problems associated with mechanical sensors. Therefore, the position is taken that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the washing machine of YOUN with the temperature profile sensing means of SMITH and BUGNACKI in order to achieve the aforementioned known advantages associated therewith. Moreover, there would have been a reasonable expectation of success in providing one washing machine imbalance sensor for another since the references are analogous art and the imbalance sensors are functional equivalents.

**Conclusion**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 7:00-4:30, except alternate Fridays.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Joseph L. Perrin, Ph.D.  
Primary Examiner  
Art Unit 1746

JLP